

AMENDMENTS TO THE CLAIMS

1. (Original) A tarnish-resistant coated object comprising:
an object;
a silver-tungsten coating on said object, wherein said silver-tungsten coating has a reflectivity of more than 40% at 700 nm after exposure of said coating to air at 200°C for a time period of at least one hour.

2-30. (Cancelled)

31. (Original) A tarnish-resistant coated object according to claim 1, wherein said object is selected from an ornamental object, a piece of jewelry, an optical object, a coin, a medal, an electrical object, a kitchen object and a military object.

32. (Currently Amended) A tarnish-resistant coated object according to claim 1, wherein said object comprises at least one of sterling silver, silver plate and fine silver (100% silver).

33-39. (Cancelled)

40. (Original) A tarnish-resistant coated object according to claim 1, wherein said silver-tungsten coating is provided by electroless deposition from an aqueous composition comprising:
a soluble source of silver ions;
a soluble source of tungsten ions;
a reducing agent; and
at least one additive.

41. (Original) A method for providing a tarnish-resistant silver-tungsten coated object comprising:
mixing a first aqueous solution with a second aqueous solution so as to provide an active silver tungsten electroless deposition solution; and

immersing an object in said active electroless deposition solution for a time period sufficient to provide a tarnish-resistant silver tungsten coated object, wherein said tarnish-resistant silver tungsten coated object has a reflectance of more than 0.6 at 700 nm after a time period of at least one hour of exposure of said tarnish-resistant silver tungsten coated object to ambient air.

42. (Original) A method according to claim 41, wherein said first solution comprises a reducing agent.

43. (Original) A method according to claim 42, wherein said reducing agent is hydrazine hydrate.

44. (Original) A method according to claim 41, wherein said first solution comprises a chelator.

45. (Original) A method according to claim 44, wherein said chelator is EDTA.

46. (Original) A method according to claim 41, wherein said second solution comprises a soluble source of silver ions and a soluble source of tungsten ions.

47. (Original) A method according to claim 41, wherein said object is a metallic object.

48. (Original) A method according to claim 47, wherein said metallic object is a silver object.

49. (Original) A method according to claim 48, wherein said silver object is selected from an ornamental object, a piece of jewelry, an optical object, a coin, a medal, an electrical object, a kitchen object and a military object.

50. (Currently Amended) A method according to claim 48, wherein said silver object comprises at least one of sterling silver, silver plate and fine silver (100% silver).

51-52. (Cancelled)

53. (Original) A method according to claim 41, wherein said object is a non-metallic object.

54. (Original) A method according to claim 52, wherein said non-metallic object comprises at least one of the following materials: a plastic, a polymer, a ceramic material, a cellulose-based material, an inorganic material, an organic material and a fabric.

55. (Cancelled)

56. (Currently Amended) A kit according to claim ~~55~~63, wherein said first aqueous solution comprises a reducing agent.

57. (Cancelled)

58. (Currently Amended) A kit according to claim ~~55~~63, wherein said first aqueous solution comprises a chelator.

59. (Cancelled)

60. (Currently Amended) A kit according to claim ~~55~~63, wherein said second aqueous solution comprises a soluble source of silver ions and a soluble source of tungsten ions.

61-62. (Cancelled)

63. (Currently Amended) A kit for providing an electrolessly-deposited metal coated object comprising:

- a first receptacle adapted to house a first aqueous solution;
- a first aqueous solution;
- a second receptacle adapted to house a second aqueous solution and further adapted to house an object;
- a second aqueous solution; and

an instruction for:

(i) pouring said first solution into said second solution in said second receptacle so as to provide an active electroless metal deposition solution; and

(ii) immersing the object in said active ~~an active~~ electroless metal deposition solution for a period of time sufficient to provide a metal coated object.

64. (Original) An electroless plating composition comprising an aqueous solution for electrolessly plating a surface, comprising:

a soluble source of silver ions;

a soluble source of tungsten ions;

a reducing agent;

at least one additive; and

a polymer adapted to induce filling of at least one of:

a substantially vertical trench of more than 300 nm depth; and

a substantially horizontal gap of more than 200 nm width;

on said surface; and

wherein said plating composition is adapted to electrolessly deposit a corrosion-free conformal layer of silver tungsten on said surface, wherein said layer is from about 0.05 to around 10 microns thick.

65. (Original) A composition according to claim 64, wherein said polymer is a polyethylene glycol (PEG).

66-72. (Cancelled)

73. (Original) A tarnish-resistant coated object comprising:
an object;

a silver-tungsten coating on said object, wherein said silver-tungsten coating has a substantially constant reflectivity of more than 90% at 500 nm after exposure of said coated object to ambient air for a time period of at least one week.

74-115. (Cancelled)

116. (Original) An electroless plating composition for preventing discoloration of a metallic object comprising an aqueous electroless plating solution, comprising:

- a soluble source of silver ions;
- a soluble source of tungsten ions;
- a reducing agent;
- at least one additive; and

wherein said plating composition is adapted to electrolessly deposit a layer of silver-tungsten on said metallic object so as to provide a silver-tungsten plated metallic object such that said silver-tungsten plated metallic object has less than a 5% increase in light absorbance in a range of incident light at 400-700 nm after exposure to ambient air for a time period of at least one week.

117-129. (Cancelled)

130. (Currently Amended) A method for providing a silver ternary metal layer on a surface, comprising:

electrolessly plating said surface in an electroless plating composition for a sufficient time to plate said surface with at least one of a silver tungsten molybdenum layer and a silver tungsten rhenium layer.

131. (Cancelled)

132. (Currently Amended) ~~An silver-tungsten-molybdenum~~ electroless plating composition, comprising:

- a soluble source of silver ions;

a soluble source of tungsten ions;
at least one of a soluble source of molybdenum and a soluble source of rhenium;
a reducing agent; and
at least one additive.

133. (Cancelled)